SEQ SEARCH SUMMARY

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model June 12, 2004, 13:33:34 ; Search time 67396 Seconds Run on: (without alignments) 17817.359 Million cell updates/sec US-09-942-025**-**12 Title: 27705 Perfect score: 1 gtggcgccgatggacagaat.....cagaggatctccatgaatag 27705 - nucleo fides Sequence: long Scoring table: OLIGO NUC Gapop 60.0 , Gapext 60.0 Searched: 3470272 seqs, 21671516995 residues see below Word size : 200 Total number of hits satisfying chosen parameters: 1 Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Listing first 500 summaries Database : GenEmbl:* 1: gb ba:* * B/c the claims are limited to 2: gb htg:* 3: gb in:* exact SEQ 12 or a portion that is gb_om:* 4: 5: gb_ov:* 6: gb pat:* 7: gb ph:* at least a PKS domain 8: gb_pl:* 9: gb_pr:* AND ble in the art, the 10: gb ro:* 11: gb_sts:* smallest PKS domain is # 12: gb sy:* 13: gb un:* greater than 65 amino acids (195 nucleotide 14: gb vi:* 15: em ba:* 16: em fun:* 17: em hum:* limiting the search to a word size of 18: em in:* 19: em mu:* 200 will retrieve all relevant hits! 20: em om:* 21: em or:* 22: em ov:* 23: em pat:* 24: em_ph:* 25: em_pl:* 26: em_ro:* 27: em sts:*

28: em_un:*
29: em_vi:*
30: em_htg_hum:*
31: em_htg_inv:*
32: em_htg_other:*
33: em_htg_mus:*
34: em_htg_pln:*
35: em_htg_rod:*
36: em_htg_rod:*
36: em_htg_wam:*
37: em_htg_vrt:*
38: em_sy:*
39: em_htgo_hum:*
40: em_htgo_mus:*
41: em_htgo_other:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES 8 Result Query No. Score Match Length DB ID Description 1 14165 51.1 33529 6 AR166425 AR166425 Sequence ALIGNMENTS RESULT 1 AR166425 LOCUS 33529 bp AR166425 DNA linear PAT 17-OCT-2001 DEFINITION Sequence 3 from patent US 6280999. ACCESSION AR166425 Applicant's CIP parent AR166425.1 GI:16241741 VERSION KEYWORDS SOURCE Unknown. ORGANISM Unknown. Unclassified. REFERENCE 1 (bases 1 to 33529) AUTHORS Gustafsson, C., Betlach, M.C., Ashley, G., Julien, B. and Ziermann, R. TITLE Sorangium polyketide synthases and encoding DNA therefor JOURNAL Patent: US 6280999-A 3 28-AUG-2001; FEATURES Location/Qualifiers 1. .33529 source /organism="unknown" /mol type="unassigned DNA" ORIGIN Query Match 51.1%; Score 14165; DB 6; Length 33529; Best Local Similarity 99.9%; Pred. No. 0; Matches 15255; Conservative 0; Mismatches 5; Indels 7; Gaps 7; Qy 12439 GATCCCCAGCAGCGGCTGGTGCTGGAGACGGCGTGGGAGGCATTGGAGCGTGCCGGCGTG 12498 Db 1 GATCCCCAGCAGCGGCTGGTGCTGGAGACGGCGTGGGAGGCATTGGAGCGTGCCGGCGTG 60

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. OM nucleic - nucleic search, using sw model Run on: June 12, 2004, 13:31:29 ; Search time 5997 Seconds (without alignments) 19625.868 Million cell updates/sec Title: US-09-942-025-12 Perfect score: 27705 Sequence: 1 gtggcgccgatggacagaat....cagaggatctccatgaatag 27705 Scoring table: OLIGO NUC Gapop 60.0 , Gapext 60.0 Searched: 3373863 seqs, 2124099041 residues Word size : 200 Total number of hits satisfying chosen parameters: 7 Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Listing first 500 summaries Database : N_Geneseq 29Jan04:* 1: genesegn1980s:* 2: genesegn1990s:* 3: geneseqn2000s:* 4: geneseqn2001as:* 5: geneseqn2001bs:* Pred. No. is the number of results predicted by chance to have ao with Abb events score greater than or equal to the score of the result being printed by analysis of the total score distribution. SUMMARIES US 20031, in which concerns to have a o solution. Summaries US 20031, in which concerns to have a solution. Summaries US 20031, in which concerns to have a solution. Summaries US 20031, in which concerns to have a solution. Summaries US 20031, in which concerns to have a solution. Summaries US 20031, in which concerns to have a solution. Summaries US 20031, in which 6: geneseqn2002s:* Result No. _ _ _ ----1 Adc26979 Sorangium 2 20582 74.3 67251 9 ADC26995/ Adc26995 Sorangium AAS17367-US 6280999 3 14165 33529 5 51.1 Aas17367 DNA seque 4 2.7 20922 9 752 ADC26981 Adc26981 Sorangium 5 480 1.7 11358 9 ADC26983/ Adc26983 Sorangium 6 AAA58917- US 6090601 368 1.3 750 3

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7

220

0.8

787

3

AAA58916- ^

Aaa58917 DNA encod

Aaa58916 DNA encod

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. OM nucleic - nucleic search, using sw model Run on: June 12, 2004, 14:52:34 ; Search time 1125 Seconds (without alignments) 13666.591 Million cell updates/sec Title: US-09-942-025-12 Perfect score: 27705 Sequence: 1 gtggcgccgatggacagaat....cagaggatctccatgaatag 27705 Scoring table: OLIGO NUC Gapop 60.0 , Gapext 60.0 Searched: 682709 seqs, 277475446 residues Word size : 200 Total number of hits satisfying chosen parameters: 3 Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Listing first 500 summaries Database : Issued Patents NA:* 1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:* 2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:* 3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:* 4: /cgn2_6/ptodata/2/ina/6B COMB.seq:* 5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:* 6: /cgn2_6/ptodata/2/ina/backfiles1.seq:* Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	& Query Match	Length	DB	ID	Description
1 2 3	14165 368 220	51.1 1.3 0.8	750	3	US-09-144-085-3 US-09-010-809-12 US-09-010-809-11	Sequence 3, Appli Sequence 12, Appl Sequence 11, Appl

ALIGNMENTS

RESULT 1 US-09-144-085-3 ; Sequence 3, Application US/09144085

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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. OM nucleic - nucleic search, using sw model Run on: June 12, 2004, 14:57:19 ; Search time 6879 Seconds (without alignments) 18383.440 Million cell updates/sec Title: US-09-942-025-12 Perfect score: 27705 Sequence: 1 gtggcgccgatggacagaat....cagaggatctccatgaatag 27705 Scoring table: OLIGO NUC Gapop 60.0 , Gapext 60.0 Searched: 2998549 seqs, 2282253817 residues Word size : 200 Total number of hits satisfying chosen parameters: 4 Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Listing first 500 summaries Database : Published Applications NA:* 1: /cgn2_6/ptodata/1/pubpna/US07 PUBCOMB.seg:* 2: /cgn2_6/ptodata/1/pubpna/PCT NEW PUB.seq:* 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:* 4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:* 5: /cgn2_6/ptodata/1/pubpna/US07 NEW PUB.seq:* 6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:* 7: /cgn2_6/ptodata/1/pubpna/US08_NEW PUB.seq:* 8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seg:* 9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:* 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:* 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:* 12: /cgn2_6/ptodata/1/pubpna/US09 NEW PUB.seq:* 13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:* 14: /cgn2_6/ptodata/1/pubpna/US10A PUBCOMB.seq:* 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:* 16: /cgn2 6/ptodata/1/pubpna/US10C PUBCOMB.seq:* 17: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:* 18: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seg:* 19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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		Se .								
Result		Query								
No.	Score	Match	Length	DB	ID	Description				
T	27705	100.0	27705	13	US-09-942-025-12	Sequence 12, Appl				
2	27705	100.0	67311	13	US-09-942-025-1	Sequence 1, Appli				
3	809	2.9	20922	13	US-09-942-025-14					
4	531	1.9	11358		US-09-942-025-16	Sequence 14, Appl Sequence 16, Appl				

ALIGNMENTS

<pre>RESULT 1 US-09-942-025-12 ; Sequence 12, Application US/09942025 ; Publication No. US20030054547A1 ; GENERAL INFORMATION: ; APPLICANT: Kosan Biosciences, Inc. ; APPLICANT: Kosan Biosciences, Inc. ; APPLICANT: Julien, Bryan ; TITLE OF INVENTION: POLYKETIDE SYNTHASE GENE FROM SORANGIUM ; TITLE OF INVENTION: CELLULOSUM ; TITLE OF INVENTION: CELLULOSUM ; FILE REFERENCE: 30062-20020.21 ; CURRENT APPLICATION NUMBER: US/09/942,025 ; CURRENT FILING DATE: 2001-08-28 ; PRIOR APPLICATION NUMBER: US 60/271,245 ; PRIOR FILING DATE: 2001-02-15 ; PRIOR FILING DATE: 2001-02-15 ; PRIOR FILING DATE: 1098-08-31 ; PRIOR APPLICATION NUMBER: US 09/144,085 ; PRIOR FILING DATE: 1998-01-22 ; NUMBER OF SEQ ID NOS: 27 ; SOFTWARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 12 ; LENGTH: 27705 ; TYPE: DNA ; ORGANISM: Sorangium cellulosum US-09-942-025-12</pre>								
ς Ε Ν	Query Match Best Local Matches 277	100.0%; Score 27705; DB 13; Length 27705; Similarity 100.0%; Pred. No. 0; 05; Conservative 0; Mismatches 0; Indels 0; Gaps	i	0;				
Qy		GTGGCGCCGATGGACAGAATGCTTGGGTTTCTGCGCGATGCATTGGCGGATCTGCTGCAG		•,				
Db	1	GTGGCGCCGATGGACAGAATGCTTGGGGTTTCTGCGCGATGCATTGGCGGATCTGCTGCAG	60					
Qу	61	GTTGCGCCGGGAGCCGTTCAGGATGATGTTCGATTCCACGAGCAGGGCCTCGACTCCGCG	120					
Db		GTTGCGCCGGGAGCCGTTCAGGATGATGTTCGATTCCACGAGCAGGGCCTCGACTCCGCG						
_								
Qу	121	AGGGCGCTGCTCCTGGTTGAAAAGCTGTCGAGCTGGACGGGGCGCGCGC	180					
Db	121	AGGGCGCTGCTCCTGGTTGAAAAGCTGTCGAGCTGGACGGGGCGCGCTCTCCCAGCCACG	180					
Qу	181	CTGGTATGGCAGCACAGCACCCTGAACGCGCTTGCTAGGCATCTGGCGGATACAAGCGGG	240					